

MR-element Contactless Angle Sensor

CP-16U Series

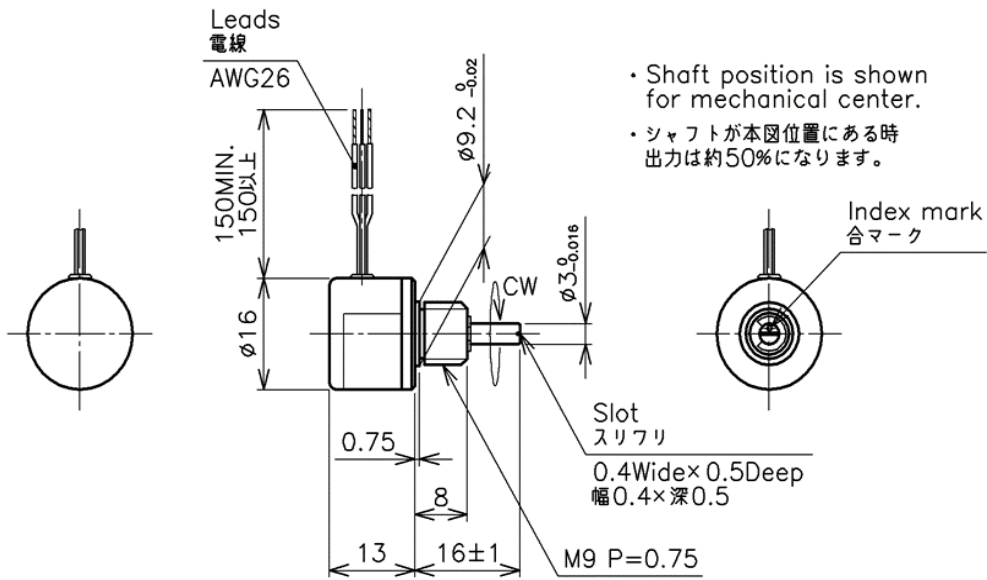


- Contactless Angle Sensor
- Lower Current Consumption: 0.6mA max.
- Effective Electrical Angle: 90°
- Independent Linearity: ±1.5%FS
- Low Torque

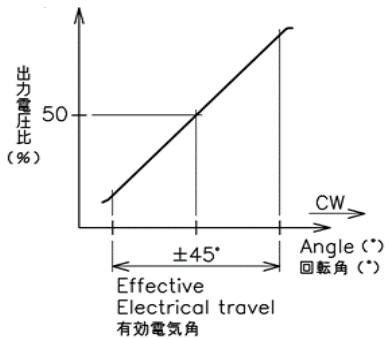
【Material】

- Housing : Aluminum
- Shaft : Stainless Steel
- Ball Bearing : Stainless Steel

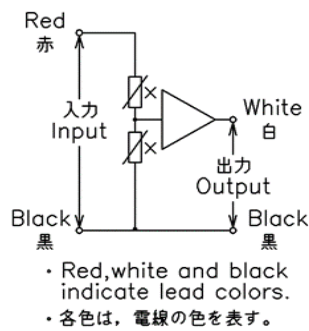
Dimension [mm]



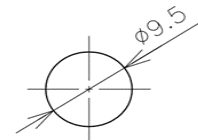
Output Characteristics



Schematic



Mounting



| | |
|--------------------|---------------|
| 【Model No.】 | CP-16U |
|--------------------|---------------|

| 【Electrical Specifications】 | | |
|------------------------------------|--------------------------------|------|
| Effective Electrical Travel | 90 | ° |
| Output Sensitivity | 3.5 ~ 6.5 /10° | %Vin |
| Independent Linearity | ±1.5 | %FS |
| Input Voltage | DC3 ~ 5.5 | V |
| Load Resistance | 100Min | kΩ |
| Temp. Characteristics | At 0° : ±0.9° At ±45° : ±7° | |
| Insulation Resistance | MIN. 100 / DC 500V | MΩ |
| Dielectric Strength | AC500 / 1 Minute | V |

| 【Mechanical Specifications】 | | |
|------------------------------------|-------------|--------|
| Total Mechanical Travel | 360 Endless | ° |
| Torque | MAX. 0.1 | mN · m |
| Thrust Load Tolerance | 1 | N |
| Radial Load Tolerance | 5 | N |
| Mass | Approx. 10 | g |

| 【Environmental Specifications】 | | |
|---------------------------------------|--|-------|
| Life Cycles | MIN. 10 Million | Cycle |
| Category Temperature Range | -30~+100 | °C |
| Storage Temperature Range | -40~+100 | °C |
| Vibration | 200m/s ² 5~500Hz(20min) 3 axis 2 hours each | |
| Shock | 1000m/s ² 11ms 3axis 3 times | |
| EMS | 25V/m, 1MHz ~ 1GHz (ISO11452-2, -3) | |
| ESD (Case to each terminal) | ±4kV (IEC61000-4-2) | |
| EMS (Between each terminal) | ±8kV (IEC61000-4-2) | |

■Accessories

M9 Nut, Toothed Lock Washer (Internal) 1piece each

■Handling Instruction

- Do not use this sensor as a variable resistor.
- This product may be influenced from external magnetic field.
- Use this sensor in the place where is protected from ESD.